

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1 1. A method of programming a welding-type
2 system, comprising:

3 storing at least one welding program in a
4 pda;

5 connecting the pda to the welding-type
6 system; and

7 downloading the at least one welding program
8 to the welding-type system.

1 2. The method of claim 1, wherein storing
2 includes uploading the at least one program, from a second
3 welding-type system.

1 3. The method of claim 1, wherein storing
2 includes e-mailing the at least one program.

1 4. The method of claim 1, wherein connecting
2 includes making a wired connection between the pda and the
3 welding-type system.

1 5. The method of claim 4, wherein connecting
2 includes making an RS232 connection between the pda and the
3 welding-type system.

1 6. The method of claim 1, wherein connecting
2 includes making a wireless connection between the pda and
3 the welding-type system.

1 7. The method of claim 6, wherein connecting
2 includes making an IR connection between the pda and the
3 welding-type system.

1 8. A method of programming a welding-type
2 system, comprising:

3 storing a plurality of welding programs in a
4 pda;

5 connecting the pda to the welding-type
6 system; and

7 selecting at least one of the plurality of
8 programs for downloading;

9 downloading the at least one of the plurality
10 of programs to the welding-type system.

1 9. The method of claim 8 wherein selecting is
2 performed before connecting.

1 10. The method of claim 8 wherein selecting is
2 performed after connecting.

1 11. The method of claim 8, wherein storing
2 includes at least one of uploading the at least one program,
3 from a second welding-type system and e-mailing the at least
4 one program.

1 12. The method of claim 9, wherein connecting
2 includes making at least one of an RS232 connection and an
3 IR connection between the pda and the welding-type system.

1 13. The method of claim 8, wherein the plurality
2 of programs are stored in a single file, and downloading
3 includes sending a portion of the file.

1 14. The method of claim 8, further comprising
2 editing the at least one of the plurality of programs.

1 15. The method of claim 14, wherein editing is
2 performed before downloading.

1 16. A welding-type system, comprising:
2 a source of welding-type power;
3 a controller, operatively connected to the
4 source of welding-type power, wherein the controller
5 includes a memory;

6 a memory input, connected to the memory and
7 further connectable to a pda;

8 a downloading routine, operatively connected
9 to the memory input.

1 17. The system of claim 16, further comprising a
2 memory output, connected to the memory and further
3 connectable to the pda.

1 18. The system of claim 16, wherein the memory
2 input includes one of a wired or wireless connection.

1 19. The system of claim 18, wherein the memory
2 input is one of an RS232 connection and an IR connection.

1 20. The system of claim 15, further comprising, a
2 pda connected to the memory input, wherein the pda includes
3 a memory with a weld program stored therein.

1 21. The system of claim 20, wherein the
2 downloading routine is stored in the pda.

1 22. The system of claim 15, wherein the
2 downloading routine is stored in the controller.

1 23. A welding-type system, comprising:
2 a source of welding-type power;
3 a controller, operatively connected to the
4 source of welding-type power, wherein the controller
5 includes a memory and a controller i/o port;
6 a pda, having a memory and a plurality of
7 weld programs stored therein, and further having a pda
8 i/o port connected to the controller i/o port;
9 a weld program selecting routine operatively
10 connected to the pda; and
11 a downloading routine, operatively connected
12 to the pda.

1 24. The system of claim 23, further comprising an
2 uploading routine, operatively connected to the pda.

1 25. The system of claim 24, wherein the i/o ports
2 includes at least one of an RS232 connection and an IR
3 connection.

1 26. The system of claim 22, further comprising a
2 weld program editing routine operatively connected to the
3 pda.

1 27. A welding-type system, comprising:
2 a source of welding-type power;
3 a controller, operatively connected to the
4 source of welding-type power;
5 controller memory means for storing at least
6 one welding program in the controller, connected to the
7 controller;
8 pda memory means for storing at least one
9 welding program in a pda;

means for connecting the pda memory means to
the controller memory means; and

12 means for downloading the at least one
13 welding program to the welding-type system, connected
14 to the pda memory means for storing.

28. The system of claim 27, further comprising, connected to the pda means for storing, at least one of:

means for uploading the at least one program from a second welding-type system;

and means for e-mailing the at least one program.

a source of welding-type power;

a controller, operatively connected to the source of welding-type power;

controller memory means for storing at least one welding program in the controller, connected to the controller;

pda memory means for storing a plurality of welding programs in a pda;

means for connecting the pda memory means to the controller memory means; and

means for the user to select at least one of the plurality of programs for downloading;

means for downloading the at least one of the plurality of programs to the controller memory means.

30. The apparatus of claim 29, wherein the means for downloading includes means for downloading a portion of a file.

1 31. The apparatus of claim 30, further comprising
2 means for editing the at least one of the plurality of
3 programs, connected to the pda memory means.

1 32. A program for storing weld schedules on
2 a pda, comprising:

3 a storage routine, that stores at least one
4 weld schedule in a memory on the pda;

5 a connection routine connects the pda to
6 connect to a welding-type system; and

7 a download routine that downloads the at
8 least one schedule to the welding-type system.

1 33. The program of claim 32, further comprising
2 an upload routine that allows the pda to upload at least one
3 weld schedule from at least one of a second welding-type
4 system and an e-mail message.

1 34. The program of claim 33, wherein the
2 connection routine includes a wireless protocol.

1 35. A program for storing weld schedule on a
2 pda, comprising:

3 a storage routine, that stores a plurality of
4 weld schedules in a memory on the pda;

5 a selection routine that allows the user to
6 select at least one of the weld schedules for
7 downloading;

8 a connection routine connects the pda to a
9 welding-type system; and

10 a download routine that downloads the at
11 least one schedule to the welding-type system.

1 36. The program of claim 35 wherein the selection
2 routine is performed before the connection routine.

37. The program of claim 36, wherein the selection routine is performed after the connection routine.

38. The program of claim 35, further comprising an upload routine that allows the pda to upload at least one weld schedule from at least one of a second welding-type system and an e-mail message.

39. The program of claim 38, further comprising an editing routine that allows the user to edit the at least one of the plurality of schedules.

40. A method of uploading programs from a welding-type system, comprising:

storing a plurality of welding programs in a memory in the welding-type system;

connecting a pda to the welding-type system;
and

selecting at least one of the plurality of programs for uploading;

uploading the at least one of the plurality of programs to the pda.

41. A method of transferring data to or from a welding-type system, comprising:

wirelessly connecting a device to the welding-type system; and

transferring a welding program to or from the device from the welding-type system.

42. The method of claim 41, further including e-mailing the program to the device, storing the program on the device, and transferring, over the wireless connection, the program to the welding-type system.

1 43. The method of claim 41, wherein wirelessly
2 connecting includes connection between welding-type system
3 and one of a pda, laptop computer and desktop computer.

4 44. A welding-type system, comprising:
5 a source of welding-type power;
6 a controller, operatively connected to the
7 source of welding-type power, wherein the controller
8 includes a memory and a controller wireless port;
9 a remote computing device, having a memory
10 for storing a plurality of weld programs therein, and
11 further having a remote wireless port connected to the
12 controller wireless port;
13 a weld program selecting routine operatively
14 connected to the device; and
15 a transfer routine, operatively connected to
16 the device.

1 45. The system of claim 44, further comprising a
2 download routine that allows the device to download at least
3 one weld schedule from the device to the controller, wherein
4 the at least one program is in an e-mail message.